CSMISS IT Seminar Series

Understanding and (Re)Designing Software Processes

by

Dr. Walt Scacchi

Research Computer Scientist,
Institute for Software Research
University of California, Irvine

Wednesday, October 3, 2001 12:00 – 1:00 P.M. 167 Conference Room

CSMISS
Center for Space Mission Information
and Software Systems

What is the most effective and most efficient way to develop complex software systems? That is a fundamental question underlying much activity within the software engineering and software process community. Software systems, such as those for deep space exploration and earth science systems, represent a complex web of technical artifacts, engineering activities, management strategies, information system technologies, and other resources, together with the people who implement them. Traditionally, processes for software system development are the result of project management regimens that have been employed in hardware development projects and coordinated by a central administrative authority. However, new knowledge-based process engineering techniques and empirical research results have given rise to new ways of understanding and (re)designing complex organizational processes. In this talk, Dr. Scacchi will highlight some of the problems and emerging solutions for understanding, (re)designing, and transforming complex organizational processes, such as those for developing software-intensive systems.

Walt Scacchi received his Ph.D. in Information and Computer Science from the University of California, Irvine (UCI) in 1981. From 1981 to 1998, he was a professor at the University of Southern California. He founded and directed the USC System Factory Project in the USC School of Engineering from 1981 to 1991, then the USC ATRIUM Laboratory in the Marshall School of Business at USC from 1993 to 1998. Then, he returned to UCI to join the Institute for Software Research. Dr. Scacchi has published over 100 research papers, directed more than 25 externally funded research projects, and consulted for two dozen commercial, government or academic enterprises. He is currently leading an NSF-sponsored project examining software development processes in different communities, including those in the X-ray astronomy and deep space imaging area.

CSMISS IT Seminar Series:
Highlighting Information Technology, methodologies, tools, and best practices used in industry and academia.